

A NEW SPECIES OF *DYSLOBUS* WITH NOTES ON
VESTIGIAL HIND WINGS AND GENITALIA AS
CHARACTERS IN THE OTIORHYNCHID
WEEVILS (Otiiorhynchinae-Coleoptera)

By PETER C. TING

State Department of Agriculture, San Francisco, California

A new species of the genus *Dyslobus* is herein described which has been recently collected in the city of San Francisco. A few notes are added on the structure of the vestigial hind wings and genitalia of both sexes, which are the results of a further attempt to describe the species' position within the genus. The writer wishes to acknowledge specimens given him for dissection by Dr. E. C. Van Dyke, Mr. Mont Cazier, Mr. A. T. McClay, and Mr. F. R. Platt.

DYSLOBUS ALEPIDOTUS Ting, New Species.

Male: Form slender elongate. Color predominately dark brown with longitudinal rows of alternately-placed white and dark patches on first, third, and fifth interspaces of the elytra; tubercles at base of declivity white and forming a pronounced, transverse V-shaped pattern. Head granulose between and behind eyes with many golden recumbent setae and a few suberect dark setae; base of head with shallow pits bearing white serrate scales; rostrum rugose dorsally with fewer golden and white raised setae and very few suberect dark setae, underneath with large deep punctures, separated from vertex by transverse constriction in front of eyes, no median carina; eyes slightly convex near dorsal margin; antennae with scape reaching slightly beyond hind margin of eyes, funicle with first and second segments elongate and subequal, third to seventh shorter but longer than broad, seventh distinctly broader than sixth, club fusiform widest at apex of first apparent segment. Prothorax broader than long (2.6 mm. to 2.2 mm.) with large, closely-placed, seta-bearing granules a few of which run together forming rugose ridges; a faint median depression near anterior margin; sides convex and slightly constricted at base and apex; faint tubercles behind front coxae. Mesosternum with white fan-shaped scales, deeply toothed at apices. Mesosternal episternum anteriorly with large rounded punctures bearing same toothed scales, posteriorly with shallower punctures bearing white setae. Metasternum with setae, only no scale-like setae. Elytra nearly twice as long as broad; humeral angles well defined; serial punctures large and deep, each bearing a hair-like seta; vestiture (fig. A) entirely of setae—no scale-like setae (fig. C) present as in other species of the genus, many suberect, dark setae three times as long as the primary setae; interspaces 1-3-5 raised and each forming a large

tubercle at base of declivity. Sternites of abdomen sparsely covered with fine golden setae; last visible sternite slightly depressed on either side but flat in middle. Legs with closely placed scale-like setae on tibiae and a few scattered ones on femora; front femora more swollen than others. Genitalia distinct from *granicolis* and *tumidus* with median lobe greatly constricted and flattened laterally near apex forming a sickle-shaped structure convex dorsally; internal sac with two large teeth near apex which are four times longer than broad, many short teeth are present.

Female: Similar to male except for following: Rather robust instead of elongate; serial punctures of elytra smaller; interspaces of elytra slightly less raised; front femora less swollen; last abdominal sternite constricted on either side of median line giving it a keeled appearance; genitalia definitely that of the genus *Dyslobus*. Holotype male length, exclusive of head, 7 mm., width 3 mm. Allotype female length 7.5 mm., width 4 mm. Other typical specimens 6.8 mm. to 8.3 mm. in length. One dwarf female 5.7 mm. in length.

Type locality: Sigmond Stern Grove, San Francisco, Calif.

Host: *Rubus vitifolius*.

Holotype male and allotype female (Catalog Nos. 4489 and 4490) in the entomological museum of the California Academy of Sciences, San Francisco. Described from a series of one-hundred and fifty-one specimens, two of which were collected by the author on March 14 and 29, 1936, and the remaining by Mr. Mont Cazier and the author on April 2, 1937. All specimens were collected in an area of a few square yards. One hundred paratypes have been designated and will be placed in the collections of the California Academy of Sciences, the State Department of Agriculture, San Francisco; Mr. Mont Cazier, United States National Museum, Dr. E. C. Van Dyke, Los Angeles Museum, and that of the author.

This species superficially resembles *granicolis* and would run there in Van Dyke's key¹ but it is distinct from *granicolis* and all other known species in the genus by the total absence of scale-like setae on the elytra and pronotum. A study of the

¹ A Short Review of *Dyslobus* Leconte, a Genus of Broad-nosed Weevils of the Subfamily Otiorynchinae with Descriptions of New Species. Pan-Pacific Ent., vol. IX, no. 1, pp. 31-47, 1933.

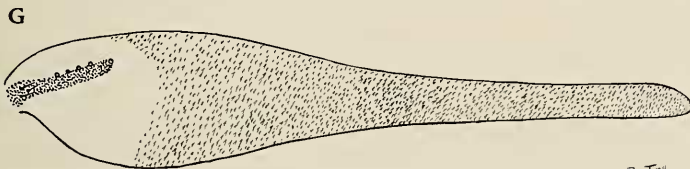
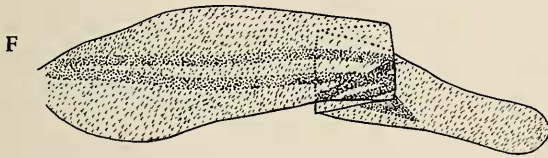
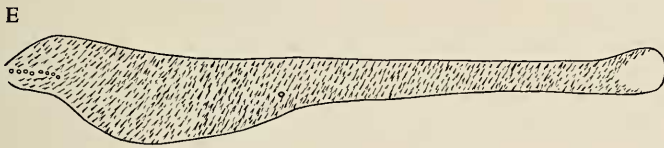
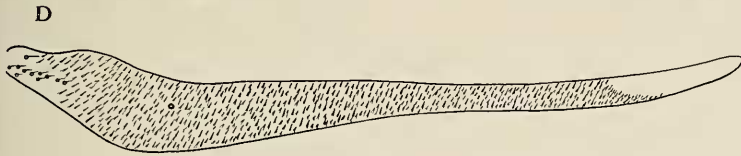
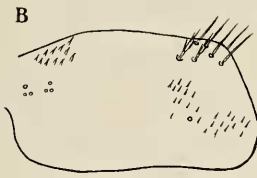
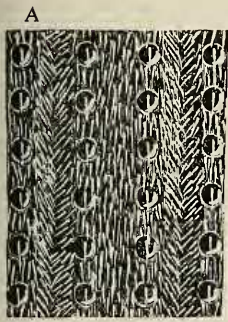


PLATE 41

Pl. Tom.

male genitalia indicates that it is most closely related to *tumidus* of the *granicollis* group.

An examination of the vestigial hind wings of fourteen species in the genera *Dyslobus*, *Adaleres*, *Panscopus*, and *Eupagoderes* (see figs. B, D, E, F, G) indicates that these structures, although varying but little in specimens of the same species, are of little use as specific characters because of their close similarity in different species and the difficulty of putting these slight differences into words. However, they should be helpful in phylogenetic studies. Since all the species in these genera are said to be incapable of flying, it is reasonable to believe that wing reduction is reaching a near minimum and that occasional specimens retaining more fully developed wings will not be found.

An examination of the male genitalia in the same species, however, rather definitely indicates that these structures are excellent characters and should be studied to substantiate the other more obvious ones. The armature of the internal sac as well as the median lobe present many usable characters. The female genitalia vary little in species of a given genus and appear to be excellent generic characters. For example, the female genitalia of *Panscopus*, *Adaleres*, and *Dyslobus* are strikingly different, but similar in the species of each genus.

EXPLANATION OF FIGURES—PLATE 41

(Illustrations of new species from paratype female.)

- Fig. A. *Dyslobus alepidotus* New species, section of elytron showing arrangement of setae and punctures.
- Fig. B. *Eupagoderes geminatus* Horn, right metathoracic wing.
- Fig. C. *Dyslobus granicollis* (Lec.), section of elytron showing arrangement of scale-like setae, other setae, and punctures.
- Fig. D. *Dyslobus alepidotus* New species, right metathoracic wing.
- Fig. E. *Dyslobus granicollis* (Lec.), same.
- Fig. F. *Adaleres humeralis* Csy., same, but showing method of folding—only example found in twenty dissections.
- Fig. G. *Panscopus abruptus* Csy., same, showing trace of vein.